

Air Quality Summary—August 2008

Baton Rouge Area

There were only two violations of the standard in the Baton Rouge area during the month of August, 2008. Bayou Plaquemine was over the standard for two hours on August 14, with a high 8-hour average of 79 ppb/109 AQI. The Carville air monitor recorded a high of 80 ppb/111 AQI on August 28 and was over the standard for a total of three hours.

Ozone Action Days were called on August 14, 29 and 30.

Other Areas of the State

There were no violations of the National Ambient Air Quality Standard (NAAQS) for ozone during the month of August, 2008.

An Ozone Action Day was called for the New Orleans area on August 14 and was later cancelled.

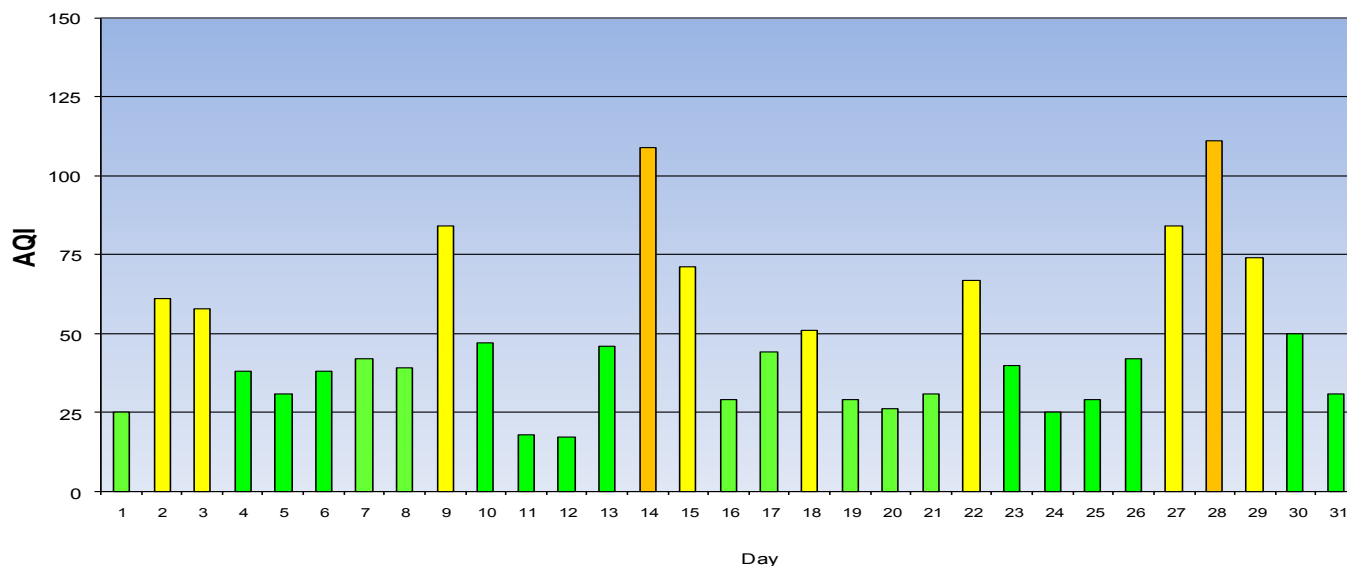


| | |
|---------|--------------------------------|
| 0-50 | Good |
| 51-100 | Moderate |
| 101-150 | Unhealthy for Sensitive Groups |
| 151-200 | Unhealthy |
| 201-300 | Very Unhealthy |

Statewide 8-HR Ozone Readings /AQI Above 75 ppb

| DATE | AQI | 8-HR OZONE Concentration (ppb) | MONITORING SITE |
|-----------|-----|--------------------------------|------------------|
| 8/14/2008 | 109 | 79 | Carville |
| 8/28/2008 | 111 | 80 | Bayou Plaquemine |

**Baton Rouge Area Daily Maximum AQI
AUGUST 2008**



Baton Rouge Climate Summary—August 2008

**Prepared by: Jay Grymes*
(based on available preliminary data as of September 23, 2008)

2008's trend of "warmer-than-normal" weather persisted through August, but much-welcomed rains during the month brought an end to the region's developing summer drought.

August's average monthly temperature for Metro Airport was 82.6°F, 1.2° above the long-term monthly norm, and ranking August 2008 among the top third "warmest" Augusts since 1930. Not only has every month of 2008 been warmer-than-normal, but August marks the 13th consecutive month with temperatures running above average! But August's departure was less than that reported for the previous four months (April-July), when monthly departures were in excess of +2°F.

Daily average temperatures were above-normal for 22 days during August. Daily highs averaged 91.5° for the month, just slightly above normal. Daily maximums reached the 90°s on 24 dates (near -normal for August), with highs of 95° or above on 6 dates (Aug 2-3, 10, 28-30). Daily minimums for the month averaged 73.7°, nearly 2° above the mean. Dewpoint temperatures (a measure of the moisture content of the air) averaged 73.0°F for August, 1.0° above the long-term mean and reflecting a tendency through the month for slightly more humid conditions compared to long-term August averages.

Table 1: Average "daylight hours" sky conditions (to 12,000 ft) during August, based on ASOS observations from Baton Rouge Metro Airport.

| Sky Condition: Sunrise to Sunset (Sky Coverage) | Clear to Mostly Sunny (0/10ths – 3/10ths) | Partly Cloudy / Partly Sunny (4/10ths – 6/10ths) | Mostly Cloudy to Cloudy (7/10ths – 10/10ths) |
|---|---|--|--|
| No. Days | 10 | 11 | 10 |

August daylight hours (official Sunrise to Sunset) range from approximately 13.6 hours (Aug 1) to 12.8 hours (Aug 31).

After two consecutive "dry" months, frequent summer rains returned to the region during August. August rainfall for Baton Rouge Metro Airport totaled 7.86", 2.00" inches above the monthly norm and more than all of the rain received during June and July combined.

August's "wetter" weather is reflected in the cloud-cover statistics for the month as well. One-third of August days (during "daylight" hours) were classified as mostly-cloudy to cloudy (Table 1); by comparison, only one day in June and one day in July were categorized as such. Figures 1 and 2 confirm the frequency of "raindays" and the increased cloud cover experienced during much of August compared to June and July.

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For Metro Airport, August's 7.86" of rain ranks among the top 20% "wettest" August totals since 1930. More importantly, August rains effectively ended the developing summer season drought that plagued much of the region. Weekly depictions of the *U.S. Drought Monitor*¹ indicate that the "abnormally dry" conditions which were in place throughout the Baton Rouge metro area at the start of the month had been erased before month's end.

August is only the third month of 2008 with above-normal rainfall at Metro Airport, and the "wettest" August for that location since 2005. Metro Airport recorded 14 days-with-rain (≥ 0.01 ") and 2 days (Aug 1 & 24) with more than 1.0" for a 24-hour total -- both numbers being near-normal for the month. Every location in the metro area reported above-average August rain totals; in fact, most locations recorded higher totals than Metro Airport, with several sites reporting double-digit accumulations.

Table 2: August 2008 rainfall for selected NWS and LSU stations across the Baton Rouge metro area. (Data are preliminary.)

| NWS Location | Monthly Rainfall | Monthly DFN | No. Days ≥ 0.01 " | No. Days ≥ 1.00 " |
|----------------------|------------------|---------------|------------------------|------------------------|
| Baker | 9.91" | +5.02" | 14 | 3 |
| BR - Metro AP | 7.86" | +2.00" | 14 | 2 |
| BR - Concord Estates | 13.23" | +7.32" | 18 | 4 |
| BR - Sherwood Forest | 11.09" | +4.30" | 15 | 4 |
| BR - LSU Campus | 9.62" | -- | 15 | 5 |
| Brusly (2 W) | 8.42" | +2.53" | 16 | 3 |
| Clinton (5 SE) | 8.60" | +3.44" | 11 | 3 |
| Denham Springs | 7.19" | +0.14" | 11 | 2 |
| Gonzales | 10.85" | +4.43" | 17 | 3 |
| Jackson (3 E) | 7.33" | -- | 9 | 2 |
| Livingston | 9.59" | +3.72" | 17 | 2 |
| LSU-Ben Hur Farm | 7.04" | +1.32" | 17 | 3 |
| New Roads | 7.48" | +2.43" | 14 | 3 |
| Oaknolia | 11.53" | +5.63" | 15 | 3 |
| Port Allen | 9.81" | +3.96" | 12 | 4 |
| Plaquemine (2 N) | M | M | M | M |
| St. Francisville | 8.03" | +3.03" | 15 | 3 |
| St. Gabriel | 9.33" | +4.25" | 20 | 3 |
| Zachary | 11.17" | +5.56" | 14 | 3 |

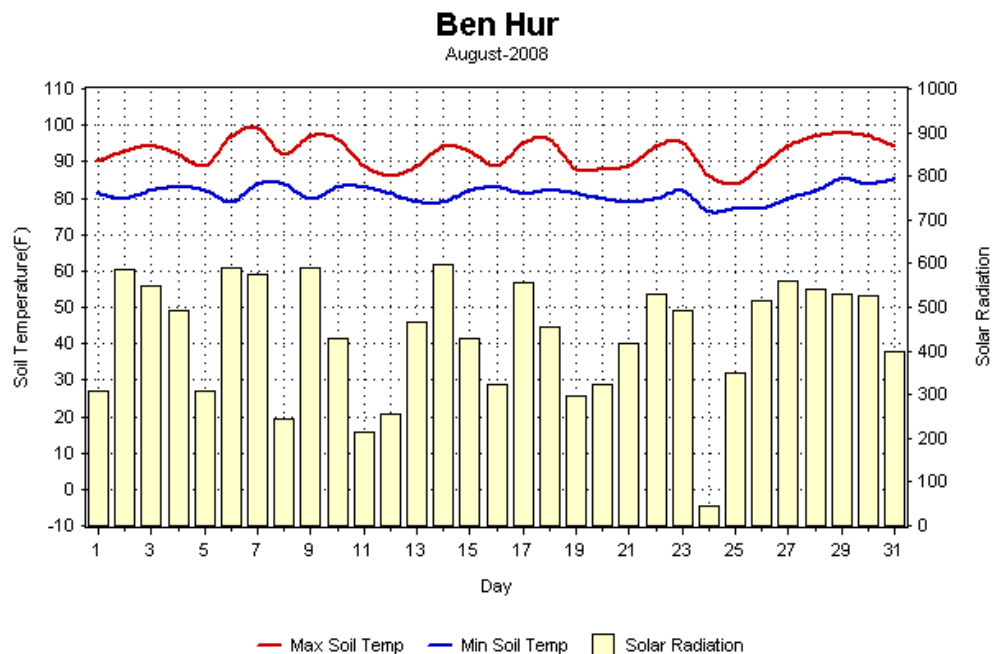
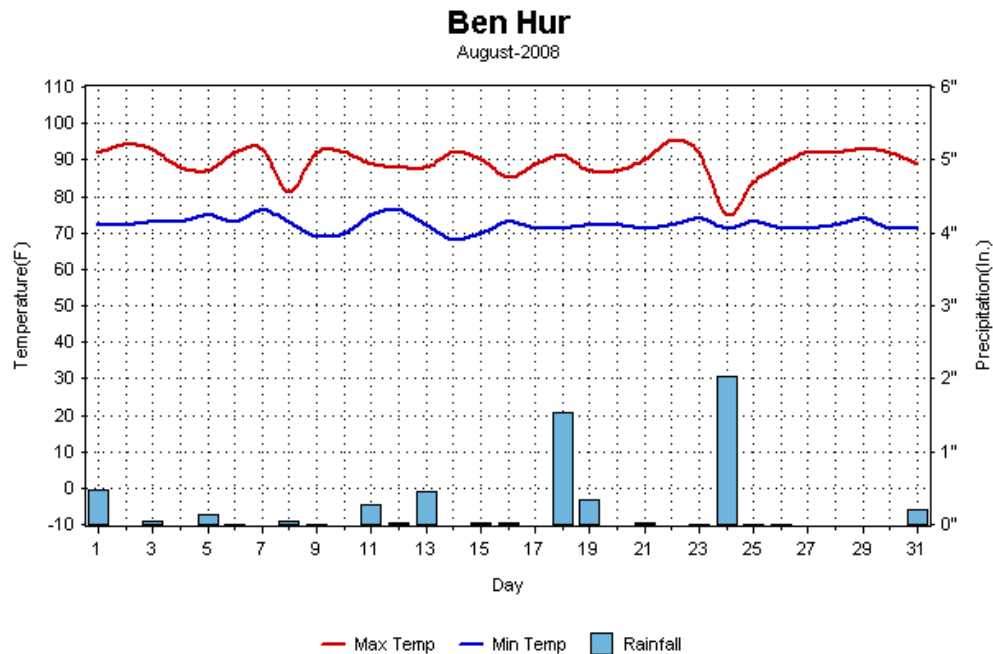
DFN - Departure-from-Normal "--" - Normals Not Available
M - Monthly Report Unavailable

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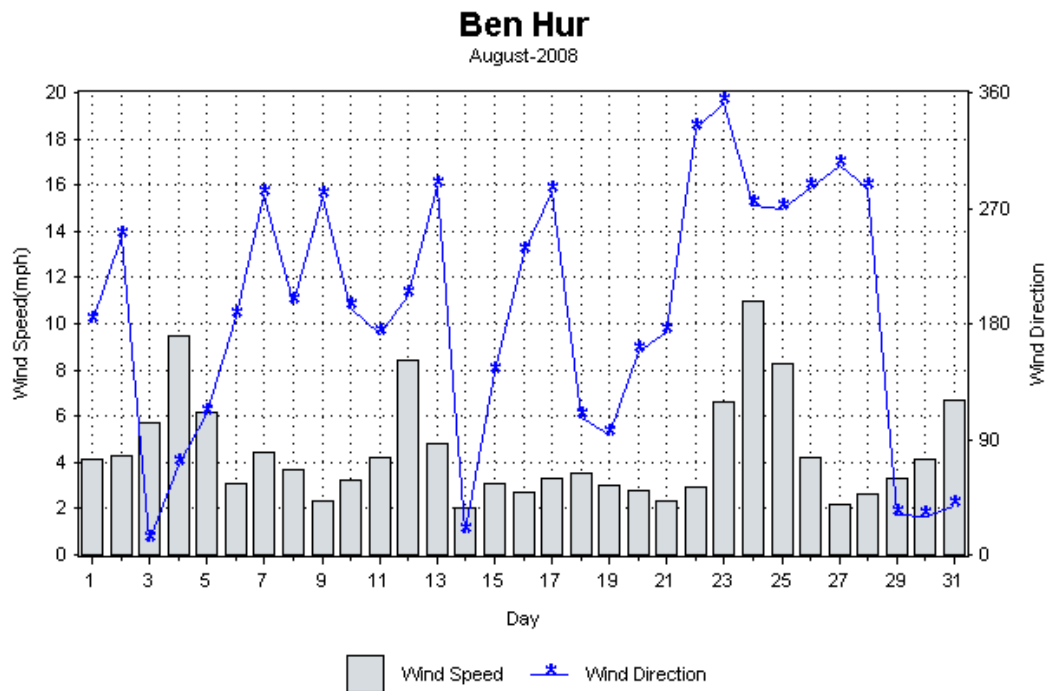
Historically, July and August tend to display the lightest average wind speeds during the year, with winds generally averaging about 5-6 mph during these months. Wind data from Metro Airport and regional LAIS stations indicate that surface wind speeds (10-meter observations) during August were below average, averaging under 5.0 mph for the month. Metro Airport average daily wind speeds exceeded 7.0 mph on only four dates (Aug 4, 12, 24-25), while averaging less than 4.0 mph on sixteen days, including a 9-day run from August 14-22.

Figures 1-3: August 2008 *Daily Max/Min Temperatures and Precipitation, Daily Solar Radiation and Soil Temperatures* and *Daily Average Winds* as recorded by the LSU AgCenter/LAIS Weather Station located at LSU-Ben Hur Farm (Nicholson Dr.)



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¹U.S. Drought Monitor weekly assessments can be found at <http://drought.unl.edu/dm/>

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*Jay Grymes, LSU AgCenter Climatologist and WAFB Chief Meteorologist, provides the climatology portion of this report as a free service to DEQ and the citizens of Louisiana.